. .

- 1. P.V. Osinenko, M. Geissler, T. Herlitzius. A method of optimal traction control for farm tractors with feedback of drive torque. *Biosystems engineering*, 129, 20-33, 2015. (78
- 2. P. Osinenko, S. Streif. Optimal traction control for heavy-duty vehicles. Control Engineering Practice, 69, 99-111, 2017. (33
- 3. P. Osinenko, D. Dobriborsci, W. Aumer. Reinforcement learning with guarantees: a review. *IFAC-PapersOnLine*, 55 (15), 123-128, 2022. (29 )
- 4. P. Osinenko, K. Biegert, R.J. McCormick, T. Göhrt, G. Devadze, J. Streif, et al. Application of non-destructive sensors and big data analysis to predict physiological storage disorders and fruit firmness in 'Braeburn'apples. Computers and Electronics in Agriculture, 183, 106015, 2021. (29
- S. Ibrahim, M. Mostafa, A. Jnadi, H. Salloum, P. Osinenko. Comprehensive overview of reward engineering and shaping in advancing reinforcement learning applications. *IEEE Access*, 2024. (27)
- T. Bögel, P. Osinenko, T. Herlitzius. Assessment of soil roughness after tillage using spectral analysis. Soil and Tillage Research, 159, 73-82, 2016.
  (18)
- 7. P. Osinenko, L. Beckenbach, T. Göhrt, S. Streif. A reinforcement learning method with closed-loop stability guarantee. *IFAC-PapersOnLine*, 53 (2), 8043-8048, 2020. (16
- 8. L. Beckenbach, P. Osinenko, S. Streif. A Q-learning predictive control scheme with guaranteed stability. *European Journal of Control*, 56, 167-178, 2020. (15
- 9. L. Beckenbach, P. Osinenko, T. Göhrt, S. Streif. Constrained and stabilizing stacked adaptive dynamic programming and a comparison with model predictive control. 2018 European control conference (ECC), 1349-1354, 2018. (15
- 10. P. Osinenko, L. Beckenbach, S. Streif. Practical sample-and-hold stabilization of nonlinear systems under approximate optimizers. *IEEE Control Systems Letters*, 2 (4), 569-574, 2018. (12

- 11. L. Beckenbach, P. Osinenko, S. Streif. Addressing infinite-horizon optimization in MPC via Q-learning. *IFAC-PapersOnLine*, 51 (20), 60-65, 2018. (12 -
- 12. P. Schmidt, P. Osinenko, S. Streif. On inf-convolution-based robust practical stabilization under computational uncertainty. *IEEE Transactions on Automatic Control*, 66 (11), 5530-5537, 2021. (10
- 13. P. Osinenko, T. Göhrt, G. Devadze, S. Streif. Stacked adaptive dynamic programming with unknown system model. *IFAC-PapersOnLine*, 50 (1), 4150-4155, 2017. (10
- 14. P. Osinenko, G. Devadze, S. Streif. Constructive analysis of control system stability. *IFAC-PapersOnLine*, 50 (1), 7467-7474, 2017. (10
- 15. A. Morozov, M. Pugach, A. Polyakov, P. Osinenko, A. Bolychev, V. Terzija, et al. Optimal flow factor determination in vanadium redox flow battery control. *IEEE Access*, 12, 19277-19284, 2024. (9
- P. Osinenko, G. Yaremenko, G. Malaniya. On Stochastic Stabilization via Nonsmooth Control Lyapunov Functions. *IEEE Transactions on Automatic Control*, 68 (8), 4925-4931, 2022. (9
- 17. P. Osinenko. Optimal slip control for tractors with feedback of drive torque. 2015. (9  $\,$
- 18. P. Osinenko, M. Geissler, T. Herlitzius. Adaptive unscented Kalman filter with a fuzzy supervisor for electrified drive train tractors. Fuzzy Systems (FUZZ-IEEE), 2014 IEEE International Conference on, 322-331, 2014. (9
- 19. . , 7, 19-22, 2011. (9 )
- 20. P. Osinenko, D. Dobriborsci. Effects of sampling and prediction horizon in reinforcement learning. *IEEE Access*, 9, 127611-127618, 2021. (8